VIBRIO PARAHAEMOLYTICUS CONTROL PLAN

2017

STATE OF ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FOOD SAFETY AND SANITATION PROGRAM

State of Alaska
Department of Environmental Conservation
Division of Environmental Health – Food Safety & Sanitation
Vibrio parahaemolyticus Control Plan

Purpose and Scope

This *Vibrio parahaemolyticus (Vp*) Control Plan is implemented in accordance with the National Shellfish Sanitation Plan Model Ordinance (NSSP MO) Section II Chapter II @.07 (adopted by reference at 18 AAC 34 under the authority of AS 17.20.005).

The goal of this plan is to reduce the probability of occurrence of *Vp* illness during periods that have been historically associated with illness and is part of a comprehensive program that includes all time and temperature requirements contained in the NSSP MO. The plan is based on the Alaska Department of Environmental Conservation (ADEC) *Vp* Risk Evaluation.

The plan outlines actions that the ADEC and *all active oyster growing, harvesting, and dealer operations* take from **June 15 through September 15**, the time period when, historically, water temperatures of classified growing areas in Alaska have exceeded 60°F, a water temperature that has been associated with confirmed *Vp* illnesses in Alaska in the past and is representative of harvesting conditions that prompt the need for a control plan. The plan also describes response activities relating to the risk management of shellfish-related illnesses associated with *Vp*, in accordance with NSSP MO Section II Chapter II @.02.

For the remainder of the year when this plan is not in effect, September 16 through June 14, control of temperature to harvest must be accomplished as specified in the NSSP MO Section II Chapter VIII.

Additional requirements and resources may be found at:

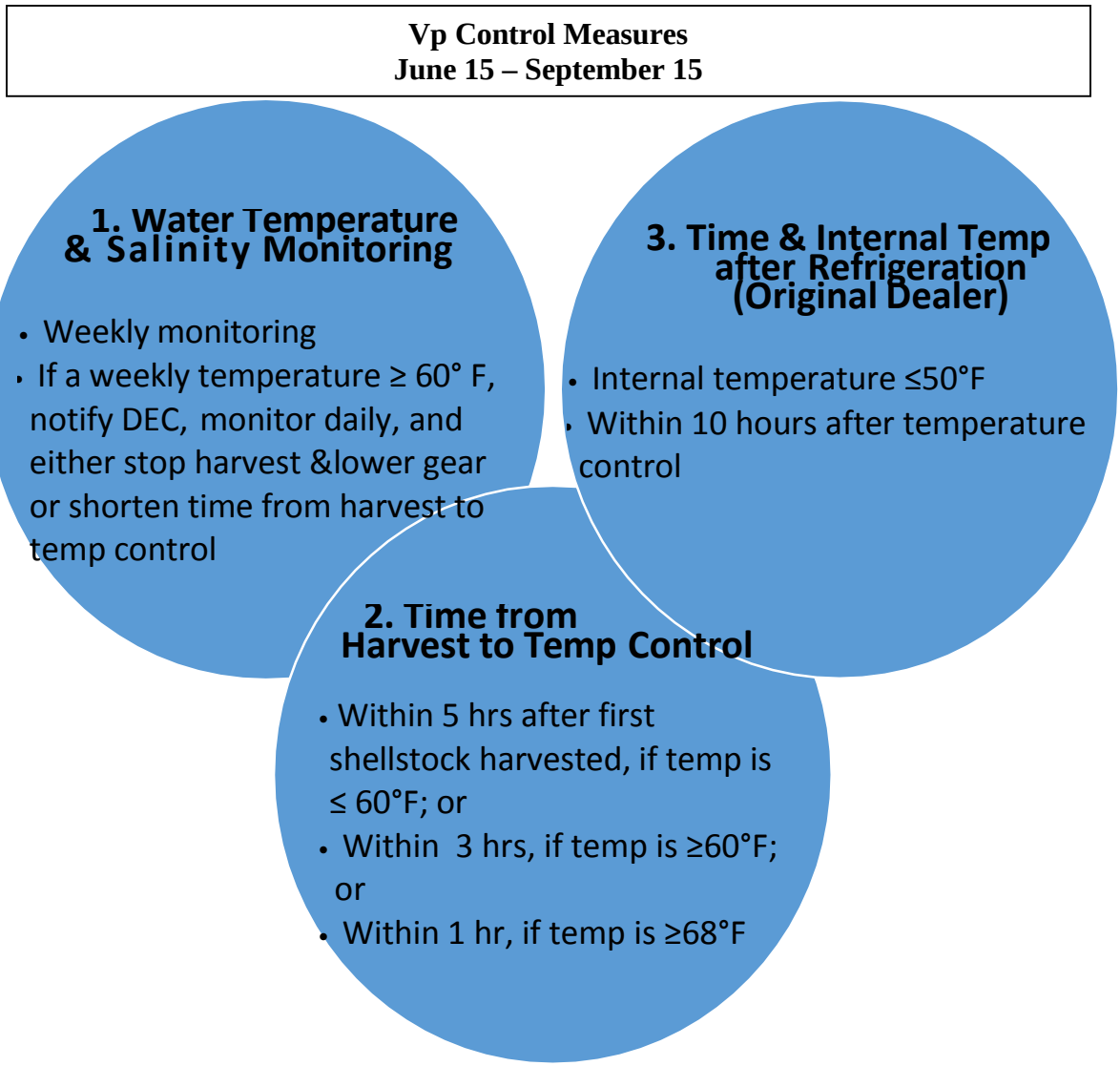
- http://dec.alaska.gov/eh/fss/seafood/Shellfish_Home.html
- https://www.fda.gov/downloads/Food/GuidanceRegulation/FederalStateFoodPrograms/UCM505093.pdf
- http://www.issc.org/vibrio-specific-information

CONTROL MEASURES

This plan calls for three control measures:

1. **Water Temperature Monitoring**
2. **Control of Time from Harvest to Temperature Control**
3. **Control of Time and Internal Temperature After Temperature Control**

Trigger to Implement Control Measures
The sole trigger for plan implementation is the time period **June 15 through September 15**.



1. Water Temperature & Salinity Monitoring

A. The grower must
   - At least **once each 7 days**, measure[1] the water temperature and salinity at the top of the suspended aquaculture gear at or about 5 p.m., or when water temperatures are typically the warmest[2]; and
   - document the date, time, specific location (depths), temperature and salinity for each measurement on a monitoring record that is kept at the growing site and, during the season, made the data available to ADEC on request; and
   - Submit to ADEC**, by October 1**, a copy of the weekly temperature and salinity monitoring records.

B. If the weekly water temperature **at the top of suspended gear** is **≥60° F (15.6° C),** the grower must
   - immediately notify the department by phone, fax, or email;
   - **daily**, measure the water temperature at the top of the suspended aquaculture gear at or about 5 p.m., or when water temperatures are typically the warmest; and
   - document the date, time, specific location (depth), and temperature value for each measurement on a monitoring record that is kept at the growing site and, during the season, make the data available to ADEC on request; and
   - Submit to ADEC, **by October 1**, a copy of daily temperature and salinity monitoring records.

C. In addition to implementing daily monitoring, the grower must either
   - stop harvest and lower the aquaculture gear below the thermocline for at least 10 days before harvesting; or
   - follow the time temperature control parameters below:
     - If the water or ambient air temperature is **≥68° F** at the time of harvest, cool the shellstock within **1 hour** after the first shellstock harvested is no longer submerged.
     - If the water or ambient air temperature is **≥60° F** and not more than **≤67˚ F** at the time of harvest, cool the shellstock within **3 hours** after the first shellstock harvested is no longer submerged.

D. A grower may raise gear or resume following *Vp* Time/Temperature Controls in (2), and return to **weekly** water temperature monitoring after **10 consecutive** water temperature values (taken once each day as described above) show temperatures **≤ 59˚ F**.

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[1] Growers must use a properly calibrated thermometer to measure water temperature. Guidance detailing how to calibrate a thermometer and examples of calibration records are at:
- https://dec.alaska.gov/eh/fss/Food/AMC/AMC_Posters/calibrate_thermo.pdf
- http://dec.alaska.gov/eh/fss/Food/AMC/AMC_Logs/log_thermometer_calibration.pdf

[2] A grower may measure and record additional water temperature and salinity data at different locations and depths for research purposes and that data will not affect the area status or trigger controls described in this plan, as long as there is no direct correlation to the product being harvested. However, the grower must provide the data to ADEC on request.

2. Control Time from Harvest to Temperature Control

A. The harvester must place shellstock under temperature control[3] within **5 hours** after the first shellstock harvested is no longer submerged; and

B. For each lot of shellstock harvested,

- Record the time and air temperature when the first shellstock harvested is no longer submerged; and
- Record the time and temperature of shellstock when placed into under temperature control.

3. Control Time/ Internal Temperature after Refrigeration (Original Dealer)

A. The original dealer must take actions in accordance with the firm's HACCP plan, which must include controls, monitoring, and verification procedures to ensure that the internal temperature of oysters has reached **<50°F (10°C)** within **10 hours**[4] of being placed under refrigeration; and

B. For each lot received,

- Record the time and air temperature at time of packing; and
- Record the time and temperature of shellstock at time of shipping[5].

Summary of Changes:

2016 – plan reformatted, rewritten, clarified requirements

2017 – plan clarified and revised to allow option of shortened temperature control from harvest when gear is not lowered, provide additional guidance links, clarify record keeping requirements

[3] Temperature control means the management of the environmental temperature of shellstock by means of ice, mechanical refrigeration or other approved means which is capable of lowering and maintaining the temperature of the shellstock at an ambient temperature of 45°F (7.5 °C) or less.

[4] Per NSSP MO Sec II Ch II @.07(B)(4)(c)

[5] The time and temperature of the shellstock at time of shipping is documented in the transportation record per the NSSP MO Sec II Ch IX .04 and .05

Vp ILLNESS RISK MANAGEMENT

After conducting an investigation to determine whether an epidemiological association exists between a Vp illness associated with consumption of shellfish harvested from a shellfish growing area and the illness was not related to post-harvesting contamination or mishandling, ADEC will calculate the risk per 100,000 servings and take action as described below:

Risk Does Not Exceed 1/100,000 within 30 days OR No More than 4 Cases w/in 30 Days and in which No More Than 2 Cases from 1 Harvest Day	• Determine extent of implicated area; and • Make reasonable attempts to ensure compliance with this plan. • *If closed, an area remains closed for a minimum of 7 days.*
Risk Exceeds 1/100,000 within 30 Days OR 5 to 10 Cases w/in 30 Days OR 2-3 Cases from 1 Harvest Day	• Determine extent of implicated area; • Immediately close implicated portion(s) of growing area; and • Transmit to FDA and receiving States, identifying dealer/shipper information. • *If closed, an area remains closed for a minimum of 14 days.*
More than 10 Cases w/in a 30-Day Period from Implicated Area OR 4 Cases from 1 Harvest Day	•Determine extent of implicated area; •Immediate close implicated portion(s) of growing area; •Initiate product recall unless implicated product is no longer available on the market or a recall would not be effective in preventing additional illness (ADEC determines); and •Issue a consumer advisory for implicated species. •*If closed, an area remains closed for a minimum of 21 days.*